PART I - Chapter I

Introduction

The present book *Forests under Pressure: Local Responses to Global Issues* is the third volume produced by the International Union of Forest Research Organizations' Special Project World Forests, Society, and Environment (IUFRO-WFSE). The two previous volumes are: *Forests and Society – Responding to Global Drivers of Change* (Mery et al. 2010) and *Forests in Global Balance: Changing Paradigms* (Mery et al. 2005).

This volume is divided into four parts. Within each part there are a number of chapters. Part I introduces the overall structure of this volume and provides an introduction to Part II, which consists of local- and regional-level case studies. Part III presents a synthesis of the case studies, drawing on their findings and important processes within individual cases. Part IV is forward-looking and discusses several of the issues and findings from Parts II and III in the context of future outlooks and scenarios.

In many parts of the world, forests and forestry are undergoing far-reaching changes. Indeed forests are under pressures that threaten the sustainable provision of forest-based goods and services. These pressures and the drivers of change affecting forests and forestry were the focus of the two previous WFSE volumes and are briefly summarised in Part I, chapter 2. Also, in the previous two WFSE volumes, valuable insights were compiled and presented as key messages to aid decision-makers and their advisors in order to foster sustainable forest management (SFM) and enhance forestry contributions to livelihoods, well-being, and sustainable development.

To date, general principles and recommendations provided in numerous publications and by various processes and organisations have not led to sufficient changes at the local level. In recognition of this crucial problem, this volume focuses on local- and regional-level initiatives from different parts of world to shed light on the prerequisite conditions (PC) and combinations of these conditions that seem to foster SFM and forest-related sustainable development at the local level, including processes and influences originating at broader national and global scales.

This volume maintains that sustainable management of natural resources, especially forests, is of vital importance to global, regional, and national efforts to achieve sustainable development and should play a key role in efforts to mitigate and adapt to climate change and further low carbon development.

In addition, an underlying premise is that there is no universally agreed upon definition of SFM and that SFM incorporates diverse understandings, values, and interests that change over time in response to dynamic and evolving needs of society. In general SFM aims to maintain and enhance economic, social, and environmental values of all types of forests for the benefit of present and future generations (UN 2007). Endeavours to further SFM often imply trade-offs between the provision of different goods and services and a wide array of diverse, often conflicting, interests having important effects on the distribution of these goods and services (for discussion on the sustainable management of tropical forests, see Part IV, chapter 2).

SFM has become the general guiding principle among the international forestry community. Numerous development programs, projects, and initiatives implemented by governments, non-governmental organisations, and donor agencies have aimed at instituting this principle in an effort to increase the contribution of forestry to livelihoods, local development, and conservation. Moving towards SFM has involved undertaking important policy reforms and institutional changes not only in the forest sector but also in other sectors (e.g. land tenure, economic policy). The outcomes of these efforts have varied greatly. In many locations unsustainable practices prevail, while in others, different stakeholders have managed to develop and/or sustain management regimes and activities that support the sustainable use of forest resources with contributions to people's livelihoods, rural development, and provision of ecological services.

Major research efforts have been directed to further increase the understanding of the different issues and conditions that directly or indirectly affect how natural resources are used and managed and consequent outcomes. This understanding is crucial for developing policies and approaches to foster sustainable resource management in the face of the drivers of change that threaten forests and forest-related livelihoods in many regions of the world. The past decades of forestry research and practical experiences have yielded important insights into how forest management is influenced by multiple external factors linked to different dimensions and operating at several scales, from local to global. Analysts have proposed a variety of general frameworks, models,

and theories that link social, economic, cultural, political, environmental, and biophysical conditions with the approaches employed by different actors to access and manage forests and show how forests respond to external influences and the resulting tradeoffs. A brief overview of the existing knowledge on these linkages is presented in Part I, chapter 3.

The analytical framework or "lens" for this book is presented in Part I, chapter 4. The development of this framework drew on lessons learned in previous WFSE volumes and other key sources. Its use encouraged case analysis from a holistic perspective, focusing attention on the prerequisite conditions and combinations of conditions that seem to foster progress towards SFM and sustainable local development. The analytical framework not only guided the preparation of the case studies but also served to structure the development of the synthesis of case studies.

Part II of this book consists of 27 case studies applying the aforementioned analytical framework. The case studies focus on areas where considerable efforts have been undertaken to further SFM and sustainable forest-related local development. While most focus on the local level and the interaction between policies and practices at that level, some cases embody processes occurring at broader scales, such as at regional or national levels. With regards to the prerequisite conditions included in the analytical framework, beyond their presence or absence, authors were also requested to focus attention on interaction among them to foster or constrain SFM. One of the book's main objectives is to learn from the array of local experiences and extract lessons to boost progress towards SFM, implying greater contributions to livelihoods and well-being, local rural development, and conservation of forests goods and services. These outcomes are crucial to efforts seeking to mitigate the impacts of global economic shocks and climate change.

Part III presents a synthesis and comparative analyses of the case studies. It begins with a concise summary of the findings from the case study analyses, including reflections on important implications of these findings for future efforts seeking to further progress towards SFM (Part III, chapter 1). It then presents a more comprehensive synthesis of the cases, first from the perspective of the primary outcomes of interest of SFM – the contribution of forests to livelihoods, and to forest extent and con-

dition - and then analysing each prerequisite condition included in the analytical framework across the cases (Part III, chapters 2 and 3). Following the across-cases analyses, chapter 4 of Part III directs attention to interactions among prerequisite conditions within the case studies. This section makes it clear that measures taken for each prerequisite condition do not act in isolation, rather, outcomes depend on complex interactions among them. In this section, attention also focuses on the influences of regional/global processes on forest-related policies and behaviour in the cases studied, demonstrating that forces/inputs influencing conditions for SFM originate from different scales, from global to local. Part III ends with a short section on methodological and analytical considerations, especially in relation to the availability and quality of information (Part III, chapter 5).

Part IV focuses on the future of several of the issues and insights discussed in Parts II and III. Part IV, chapter 2 explores the evolution of the SFM concept over the past decades and how it might evolve in coming years. This is an important issue since it will also influence the strategies required to achieve SFM, which are at least partially conditional on our shared understanding of SFM. Part IV, chapter 3 then applies an analytical exercise deemed to be "forward looking," an evolving academic discipline finding applicability in forest sciences. One important option of forward looking is the development of future scenarios, relying primarily on expert knowledge rather than on statistical models. By using so-called multi-scale scenarios, forward -looking exercises can draw on expertise from multiple stakeholders, including rural communities, small and medium forest holders, corporations, administrators, and policymakers, thereby adding to the value and bolstering the legitimacy of scenarios for multiple purposes, including forest policy formulation. Forward looking can also be done more specifically by anticipating trends in the prerequisite conditions that contribute to SFM. Part IV, chapter 3 summarises the various FAO Outlook Studies to anticipate future trends in the prerequisite conditions included in the analytical framework. The last chapter of Part IV (chapter 4), tries to show how the prerequisite conditions for SFM might evolve under different Shared Socioeconomic Pathways that are one component of a new round of climate scenarios, focusing primarily on socio-economic conditions.